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DEB:AJC:kfd  
November 9, 1998



GRU 1642  
PATENT APPLICATION  
DOCKET NO.: GSF97-06A

# 6/7.R.  
11/18/98

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Gerd Sutter, Marion Ohlmann and Volker Erfler

Application No.: 09/002,443 Group Art Unit: 1642

Filed: January 2, 1998 Examiner: Not Assigned

Title: RECOMBINANT MVA VIRUS, AND THE USE THEREOF

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231

on 11-9-98 Karen DiRocco Signature

Karen DiRocco Typed or printed name of person signing certificate

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

This Information Disclosure Statement is submitted:

under 37 CFR 1.129(a), or

(First/Second submission after Final Rejection)

under 37 CFR 1.97(b), or

(Within three months of filing national application; or date of entry of the national stage in international application; or before mailing date of first office action on the merits; whichever occurs last)

under 37 CFR 1.97(c) together with either:

a Statement under 37 CFR 1.97(e), as checked below, or

a \$240.00 fee under 37 CFR 1.17(p), or

(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

under 37 CFR 1.97(d) together with:

a Statement under 37 CFR 1.97(e), as checked below, and

a Petition under 37 CFR 1.97(d)(2), and

a \$130.00 petition fee set forth in 37 CFR 1.17(I).

(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Applicant requests that the attached IDS and cited reference(s) \_\_\_\_\_ be placed in the application filewrapper.  
(Filed after payment of issue fee)

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Statement Under 37 CFR 1.97(e)

Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or

No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Enclosed herewith is form PTO-1449:

Copies of the cited references are enclosed.

Copies of cited references are enclosed except those entered in prior application, U.S. Serial No. \_\_\_\_\_, and references that are not required to be submitted under 37 CFR 1.98.

The listed references were cited in the enclosed International Search Report in a counterpart foreign application.

Concise Explanation Requirement (non-English references):

The "concise explanation" requirement for reference(s): AL, AM, AT, AU and AW under 37 CFR 1.98(a)(3) is satisfied by:

the explanation provided on the attached sheet.

the explanation provided in the Specification.

submission of the enclosed International Search Report.

the enclosed English language abstracts. (attached as last page of the reference or within text of the reference)

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

Enclosed is a check in the amount of \$\_\_\_\_\_.

Please charge Deposit Account 08-0380 in the amount of \$\_\_\_\_\_.

A copy of this Statement is enclosed.

Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

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Lexington, Massachusetts 02421-4799

Dated: November 9, 1998

PTO-1449 REPRODUCED			ATTORNEY DOCKET NO. GSF97-06A	APPLICATION NO. 09/002, 443			
INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary) NOV 12 1998			APPLICANT Gerd Sutter, et al.				
			FILING DATE January 2, 1998	GROUP 1642			
<b>U. S. PATENT DOCUMENTS</b>							
EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
WZ	AA	5,185,146	09-FEB-93	Altenburger, W.	424	89	04-JAN-89
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
<b>FOREIGN PATENT DOCUMENTS</b>							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES      NO
WZ	AL	EPO 324350A1	19-JUL-89	Europe	—	—	
WZ	AM	CH 568 392	31-OCT-75	Switzerland	—	—	
	AN						
	AO						
	AP						
	AQ						
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
WZ	AR	Sutter, G., et al., "A Recombinant Vector Derived from the Host Range-Restricted and Highly Attenuated MVA Strain of Vaccinia Virus Stimulates Protective Immunity in Mice to Influenza Virus," <i>Vaccine</i> , 12(11):1032-1040 (1994).					
WZ	AS	Hirsch, V.M., et al., "Limited Virus Replication Following SIV Challenge of Macaques Immunized with Attenuated MVA Vaccinia Expressing SIVsm env and gag-pol," <i>Vaccines</i> 95, <i>Cold Spring Harbor Laboratory Press, USA</i> , pgs. 195-200 (1995).					
WZ	AT	Mayr, A., et al., "Abstammung, Eigenschaften und Verwendung des Attuierten Vaccinia-Stammes MVA," <i>Infection</i> , 3:6-14 (1975).					
WZ	AU	Mayr, A., et al., "The Smallpox Vaccination Strain MVA: Marker, Genetic Structure, Experience Gained with the Parenteral Vaccination and Behavior in Organisms with a Debilitated Defence Mechanism," <i>Zbl. Bakt. Hyg., I Abt. Org. B</i> , 167:375-390 (1978).					
EXAMINER WZ			DATE CONSIDERED 3/2/00				

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EXAM- INER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
<b>FOREIGN PATENT DOCUMENTS</b>							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES      NO
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
MVA	AV	Meyer, H., et al., "Mapping of Deletions in the Genome of the Highly Attenuated Vaccinia Virus MVA and their Influence on Virulence," <i>J. Gen. Virol.</i> , 72:1031-1038 (1991).					
MVA	AW	Stickl, H., et al., "MVA-Stufenimpfung Gegen Pocken" <i>Dtsch. Med. Wschr.</i> , 99:2386-2392 (1974).					
MVA	AX	Sutter, G. and Moss, B., "Nonreplicating Vaccinia Vector Efficiently Expresses Recombinant Genes," <i>Proc. Natl. Acad. Sci., USA</i> , 89:10847-10851 (1992).					
MVA	AY	Sutter, G. and Moss, B., "Novel Vaccinia Vector Derived from the Host Range Restricted and Highly Attenuated MVA Strain of Vaccinia Virus," <i>Dev. Biol. Stand. Basel, Karger</i> , 84:195-200 (1995).					
MVA	AZ	Altenburger, W., et al., "Partial Deletion of the Human Host Range Gene in the Attenuated Vaccinia Virus MVA," <i>Arch. Virol.</i> , 105:15-27 (1989).					
MVA	AR2	Hirsch, V.M., et al., "Patterns of Viral Replication Correlate with Outcome in Simian Immunodeficiency Virus (SIV)-Infected Macaques: Effect of Prior Immunization with a Trivalent SIV Vaccine in Modified Vaccinia Virus Ankara," <i>J. Virol.</i> , 70(6):3741-3752 (1996).					
EXAMINER <i>MVA</i>			DATE CONSIDERED 3/2/00				